



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: V2522-A5  
UNIQUE ID NUMBER: 3IA006  
COMBUSTOR:  
ENGINE TYPE: MTF

BYPASS RATIO: 4.9  
PRESSURE RATIO ( $\pi_{00}$ ): 25.6  
RATED THRUST ( $F_{00}$ ) (kN): 102.7

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	0.5	33.0	53.3	11.6
AS % OF ORIGINAL LIMIT	2.3	28.0	58.5	49.4
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			73.1	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			88.9	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			101.1	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			121.3	

### DATA STATUS

- PRE-REGULATION  
x CERTIFICATION  
- REVISED (SEE REMARKS)

### TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES  
- DEDICATED ENGINES TO PRODUCTION STANDARD  
- OTHER (SEE REMARKS)

### EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE  
(ANNEX 16 VOLUME II)

### CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)  
x OUT OF PRODUCTION (DATE: - )  
- OUT OF SERVICE (DATE: - )

### MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
TAKE-OFF	100	0.7	0.971	0.04	0.57	24.50	5.4
CLIMB OUT	85	2.2	0.817	0.04	0.67	20.80	7.5
APPROACH	30	4.0	0.311	0.06	2.60	8.70	4.0
IDLE	7	26.0	0.118	0.10	13.42	4.50	2.6
LTO TOTAL FUEL (kg) or EMISSIONS (g)			407	30	2760	4720	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				0.3	26.9	46.0	9.0
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)							
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)							

### ACCESSORY LOADS

POWER EXTRACTION 0 (kW)  
STAGE BLEED 6.2 / 5.5 (% CORE FLOW)

AT - POWER SETTINGS  
AT 7% / 30% POWER SETTINGS

### ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101-101.8
TEMPERATURE (K)	288-296
ABS HUMIDITY (kg/kg)	0.0086-0.0114

### FUEL

SPEC	Jet A
H/C	1.9
AROM (%)	

MANUFACTURER: International Aero Engines  
TEST ORGANIZATION: Pratt & Whitney  
TEST LOCATION: East Hartford, CT  
TEST DATES: 12/08/1992-13/08/1992

### REMARKS

1. Engine Type description originally wrongly given as TF; amended in Issue 15 to MTF

Compliance with Fuel Venting requirements:

- ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)